

First APA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **93**
- SRM **5.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (52.6%)	80 %	5
Grain	Strzegom Wiedeński	1 kg (17.5%)	79 %	10
Grain	Karmelowy Jasny 30EBC	1 kg (17.5%)	75 %	30
Grain	Pszeniczny	0.5 kg (8.8%)	85 %	4
Grain	Płatki owsiane	0.2 kg (3.5%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12 %
Boil	Mosaic	20 g	60 min	10 %
Boil	Centennial	30 g	60 min	10.5 %
Boil	Mosaic	20 g	15 min	10 %
Boil	Centennial	25 g	15 min	10.5 %
Aroma (end of boil)	Citra	20 g	0 min	12 %
Dry Hop	Citra	60 g	14 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis